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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,367	12/03/2003	Robert C. Becker	P02,0126 01 H0003414 DIV	7123
128	7590	06/06/2005	EXAMINER NGUYEN, KIMBERLY D	
HONEYWELL INTERNATIONAL INC. 101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245			ART UNIT 2876	PAPER NUMBER

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/726,367

Applicant(s)

BECKER ET AL.

Examiner

Kimberly D. Nguyen

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 March 2005.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 37-51, 76 and 77 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 37-39, 42-49, 76 and 77 is/are rejected.  
 7) ☒ Claim(s) 40-41 and 50-51 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_\_  
 4) ☐ Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_  
 5) ☐ Notice of Informal Patent Application (PTO-152)  
 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Amendment*

1. Acknowledgement is made of Amendment filed March 7, 2005.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 37-39, 42-49, and 76-77 are rejected under 35 U.S.C. 102(b) as being anticipated by Tuttle et al. (US 6,220,516; hereinafter “Tuttle”).

Re claims 37, 42-43: Tuttle teaches a method of conserving battery power in a RFID tag having a battery, a receiver, and a transmitter (col. 4, lines 28-33; col. 5, lines 5-10), the method comprising:

duty cycling the receiver so that the receiver is turned on during ON (active/waked mode) times of duty cycles and so that the receiver is turned off during OFF (passive/sleep mode) times of the duty cycles (“... the term “passive” refers only to the fact that no battery is used, whereas the electrical circuitry on the IC is indeed active while being powered by the RF coil and capacitor combination.” (col. 3, lines 50-53) (col. 4, lines 28-41));

during the ON (active/waked mode) times of the receiver, receiving a frequency from a tag reader/interrogator (“When a received signal has substantial in-band energy as detected by wake-up circuit 12, control logic 15 enables receiver 13 for receiving and decoding a radio signal on antenna 4 and 5.” (col. 6, lines 26-29)) (col. 6, lines 8-59); and

Art Unit: 2876

transmitting data to the reader at the frequency (“... control logic 15 reads transmit data from memory 16 and enables transmitter 14 for sending the transmit data as a second radio signal on antenna 4 and 5.” (col. 6, lines 35-38)) (figs. 1A-1B and 2; col. 6, line 8 through col. 7, line 67).

Re claims 38-39, 45-49: Tuttle teaches receiving a hop sequence during ON times, wherein the frequency is a constituent of the hop sequence (col. 7, lines 25-31) (figs. 1A-1B and 2; col. 6, line 8 through col. 7, line 67).

Re claims 44: Tuttle teaches an RFID tag comprising a transmitter (14 in figs. 1A-1B) arranged to transmit first data to a tag reader (“... control logic 15 reads transmit data from memory 16 and enables transmitter 14 for sending the transmit data as a second radio signal on antenna 4 and 5.” (col. 6, lines 35-38)); a receiver (13 in figs. 1A-1B) arranged to receive second data from the tag reader (“When a received signal has substantial in-band energy as detected by wake-up circuit 12, control logic 15 enables receiver 13 for receiving and decoding a radio signal on antenna 4 and 5.” (col. 6, lines 26-29)) (col. 6, lines 8-59); a battery (2 and 3 in fig. 1A, and 20 in fig. 1B); a switch coupling the battery to the receiver (col. 4, lines 27-32); and a controller arranged to operate the switch in a duty cycle such that power is provided by the battery to the receiver during ON (active/waked mode) times of the duty cycle and such that power from the battery to the receiver is interrupted during OFF (passive/sleep mode) times of the duty cycle (figs. 1A-1B and 2; col. 6, line 8 through col. 7, line 67).

Re claims 76-77: Tuttle teaches the RFID tag has two modes of operation such as the wake-up mode and the sleep mode, wherein “the wake-up circuit senses in-band energy and switches from a sleep mode to an operating (waked) mode. The sleep mode being useful during

Art Unit: 2876

transit and storage of the RFID device to conserve battery power.” (col. 4, lines 27-33), wherein the waked mode and the sleep mode serve as the predetermined ON and OFF times of the duty cycle.

*Allowable Subject Matter*

4. Claims 40-41 and 50-51 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

The record of prior art fails to teach the communications between the RFID tag and the tag reader are conducted within a message frame, wherein the message frame comprises a header and a time slot, wherein the header is transmitted by the tag reader and contains the frequency wherein the time slot comprises a header portion and a data portion, wherein the header portion is transmitted by the tag reader and also contains the frequency, and wherein the transmitting of data comprises transmitting data from the RFID tag to the tag reader in the data portion of the time slot.

*Response to Arguments*

6. With respect to the double patenting rejection as set forth in the previous Office action dated December 2, 2004 and in view of the applicants’ argument that “... independent claim 37 adds to dependent claim 40 the additional limitations of duty cycling the receiver so that the receiver is turned on during ON times of duty cycles.... Accordingly, claims 37-51 of the present application and the claims of the ‘099 patent do not claim the same invention and the double

Art Unit: 2876

patenting rejection must fail.” (page 18, line 15 through page 19, line 5), the double patent rejection has been withdrawn by the examiner.

7. In response to applicants’ argument that “Claims 25-36 and 52-75 are subject to a restriction requirement that is being contested.” (page 1, last paragraph), upon further review of claims 25 and 52, the examiner respectfully submits that claims 25 and 52 indeed are different invention(s) from independent claim 37 as set forth in the Office action dated August 23, 2004. Accordingly, the restriction remains outstanding as set forth in the prior Office action and claims 25-36 and 52-75 will be withdrawn for further consideration.

8. In response to applicants’ argument that “The Tuttle patent does not disclose that the enclosed transceiver 1 or 18 receives a frequency from the interrogator and transmits data back to the interrogator using that received frequency.” (page 21, lines 12-16), the examiner respectfully requests the applicants to further review the claimed limitations of claim 37 wherein the phrase “during the ON times of the receiver, receiving a frequency from a tag reader; and transmitting data to the reader at the frequency”, and Tuttle’s reference discloses the following “...the integrated circuit receiver and transmitter are operated in a spread spectrum mode and in the frequency range of 200 MHz to 10GHz, with the **range** of 800 MHz to 8 GHz ...” (col. 3, lines 1-8), and in lieu of the “broad range” of the frequencies that are taught by Tuttle’s disclosure and due to the fact that Tuttle DOES NOT specifically teach that the transceiver includes a circuit having the rolling-code/frequency decoder or the like, the examiner believes that the system of Tuttle will transmit the data/information at a certain/specific frequency, such as 800MHz from the reader to the receiver and thereafter the receiver will transmit the 800MHz

Art Unit: 2876

to the reader, etc. Therefore, given its broadest reasonable interpretation of the instant claimed invention, Tuttle anticipates the claimed invention.

*Conclusion*

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

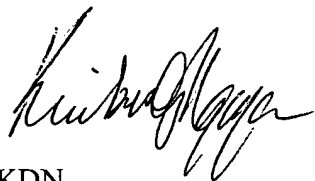
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly D. Nguyen whose telephone number is 571-272-2402. The examiner can normally be reached on Monday-Friday 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

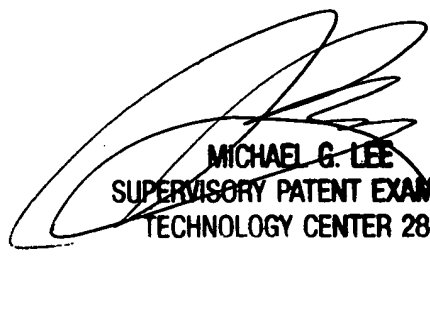
Art Unit: 2876

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KDN

May 31, 2005



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